

REMARKS

Claims 1-4 and 6-14 are now pending in the application. Claim 1 is currently amended. Claim 5 has been cancelled. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kai et al. (U.S. Pat. No. 6,849,993). This rejection is respectfully traversed.

The applicants' invention facilitates the elimination of the base normally attached to the sealing portion. This elimination is accomplished by attaching the sealing portion to the neck portion of the reflecting mirror with heat-resistant cement, attaching the external lead wire to the outward drawn lead wire by plastic flow of a caulking member, and protection of the caulking member by placement in the sealing portion and/or a cement covering. The result is reduction in size and cost of the lamp without sacrificing safety features and functional operation. Another result is improved startup performance using the LA terminal. This improvement is obtained because the metal base allows leakage of the high-pressure pulse into the reflection mirror. Thus, elimination of the base eliminates this leakage.

Kai is generally directed toward a discharge lamp and lamp unit with caulking member. While Kai is relied upon as teaching some of the elements of applicants' claims, Kai makes no attempt to eliminate the base. Kai does not appreciate the advantages of doing so and thus does not teach the structure employed by applicants to eliminate the base and its attendant problems. As will be more fully discussed below,

applicants eliminate a base attached to the first sealing portion and instead employ a caulking member that is surrounded and covered with cement.

The Examiner appears to agree that Kai teaches that a base (55) is attached to the sealing portion. However, the Examiner remarks that it would be obvious to remove the base from the first sealing portion, because if the caulking portion in the first sealing portion is surrounded and covered with cement, the base is not necessary. In this regard, the Examiner considers the base unnecessary because Kai teaches that the reflecting mirror 60 is attached to the sealing portion 20' (Fig. 3) with cement (col. 8, lines 53-55), and the external lead wire and outward drawn lead wire are joined by plastic flow of the caulking portion 40' (Fig. 4; col. 8, lines 25-37). However, this is not a teaching that the base should be eliminated. Indeed, Kai does not teach or suggest that such elimination would have any benefit whatsoever; and Kai certainly does not teach the structure found in applicants invention for elimination of the base. The Examiner should not use hindsight of applicants invention as motivation to eliminate the base that is clearly necessary in the Kai design.

The Examiner also asserts that part of the caulking member is inside the sealing portion, which is covered with cement. However, Kai provides absolutely no teaching that the caulking member is anywhere but inside the base. Figure 4 of Kai clearly illustrates the caulking member 40' is located entirely within the base 55, and not at all in the sealing portion 20'. The examiner also asserts that the caulking member is surrounded and covered with cement, but Kai does not teach this either. Rather, Kai column 8, lines 53-55m, merely indicates that the sealing portion is attached to the reflecting mirror 60 by cement.

In view of the foregoing, it is respectfully submitted that Kai did not appreciate the desirability of eliminating the base, and indeed specifically teaches that a base should be used. Applicants' independent claim 1 expressly recites that no base is attached to the first sealing portion. Thus claim 1 distinguishes over Kai in this first respect. Furthermore, as noted above, Kai does not teach that the caulking member is surrounded and covered with cement. Thus this language has also been added to claim 1 to further distinguish applicants' invention from Kai. It is respectfully submitted that claim 1, and all claims dependent thereon, are allowable over the art of record.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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